## Lake Sturgeon

## Acipenser fulvescens

Identifying Characteristics: (Native Fish) Most notable characteristic is the 5 rows of bony plates (scutes) that become less distinguishable in adults. Lake sturgeons have a large protrusible, suctorial mouth on the bottom



side of the head with 4 barbels in front of the mouth and beneath the snout. Lake sturgeons have a single dorsal fin located far back near the caudal (tail) fin. The tail is heterocercal with the upper lobe much larger than the rounded lower

lobe. Lake sturgeon have no simple scales, the body is covered by dermal denticles on tough skin. Juvenile lake sturgeon are a sandy brown color with black blotches, while adults are olive-brown to grey with white underneath and lacking black blotches.

Lake Sturgeons inhabit large river and lake systems primarily in the Mississippi River, Hudson Bay and Great Lakes basins. It has and continues to represent an important biological component of the Great Lakes fish community. By the early 1900's many populations of lake sturgeon throughout their range had been greatly reduced or extirpated as a result of overfishing, habitat loss, the construction of dams, and pollution. Lake sturgeons are listed as a threatened species in Michigan and either threatened or endangered by 19 of the 20 states within its original range in the United States. This ancient family of fishes has been recognized since the Upper Cretaceous period (136 million years ago), at a time when dinosaurs were at the height of their development. Lake sturgeons have retained primitive internal structures such as a cartilaginous vertebrae and a notochord, instead of calcified bone as found in modern fish.

Lake sturgeons are the only sturgeon species endemic to the Great Lakes basin and are the largest freshwater fish indigenous (native) to that system. Lake sturgeon can be considered a nearshore, warmwater species with water temperature and depth preferences of low 50s to mid-60oF and 15-30 feet, respectively. Lake sturgeons are benthivores, feeding on small invertebrates such as insect larvae, crayfish, snails, clams, and leeches that they find along the bottom.

Life history characteristics of lake sturgeon are unique with respect to other Michigan fishes. Sexual maturity in females is reached between 14 and 33 years, most often from 24-26 years; and, 12 to 17 years for males. Female lake sturgeons spawn once every 3 to 7 years while males spawn every 1 to 4 years. Spawning occurs on clean, gravel shoals and stream rapids from mid April to late May in preferred water temperatures of 55-64oF. Female lake sturgeon may lay 4,000 to 7,000 eggs per pound of fish. The typical life-span of lake sturgeon is 55 years for males and 80-100 years for females. The current state record for a legally harvested lake sturgeon is 193 pounds taken from Mullett Lake, Cheboygan County.

Habitat selection by lake sturgeon varies widely throughout their range and environment that they inhabit. Some adult lake sturgeons have been found to remain in a small territory during the summer months, while others have been observed long distances from their original capture site one year later. Adult sturgeon are known to intermix in the Great Lakes during non-spawning periods, but habitually return to spawn in streams where they were born (homing behavior), often migrating long distances up rivers in the spring. After hatching, some young lake sturgeons have been observed to remain in their natal rivers for their first summer of life.